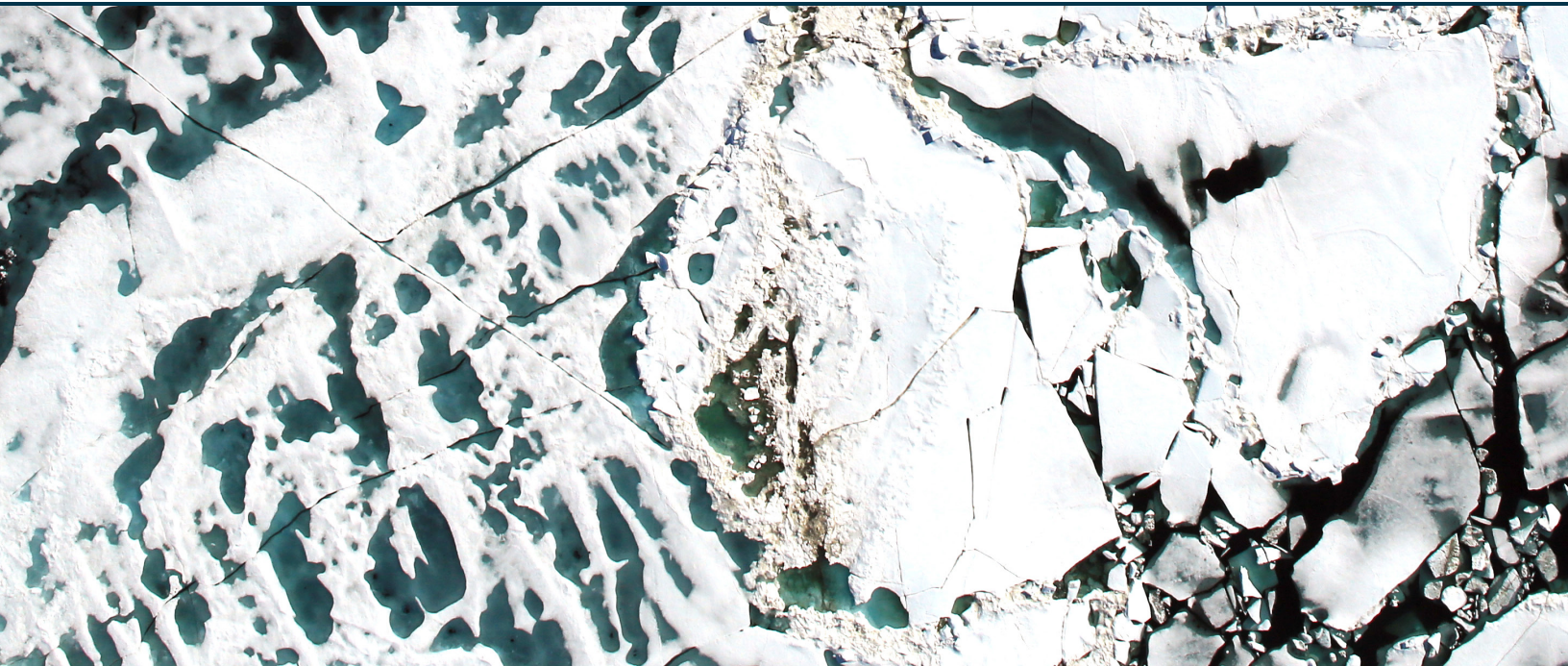




U.S. Global Change
Research Program

OUR CHANGING PLANET

The U.S. Global Change Research Program for Fiscal Year 2017
A Supplement to the President's Budget



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OUR CHANGING PLANET

The U.S. Global Change Research Program for Fiscal Year 2017
A Supplement to the President's Budget

A Report by the U.S. Global Change Research Program
and the Subcommittee on Global Change Research

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Cover: Chukchi Sea, NASA/Goddard/Operation IceBridge. Page 1: 2016 blizzard, NASA/SuomiNPP/VIIRS. Page 5: Storm runoff interacting with ocean currents, NASA/Goddard/SuomiNPP/VIIRS via NASA's OceanColor. Page 29: Lake Powell, NASA/EarthKAM.org. Page 37: Melt water over Arctic sea ice, NASA/Operation IceBridge. Page 41: 2015 wildfires, Jeff Schmaltz LANCE/EOSDIS MODIS Rapid Response Team, GSFC. Page 43: Wetlands surrounding Delacroix, LA; NASA Earth Observatory images by Jesse Allen, using Landsat data from the U.S. Geological Survey.

Since 1989, the U.S. Global Change Research Program (USGCRP) has submitted annual reports to Congress called Our Changing Planet. The reports describe the status of USGCRP research activities, provide progress updates, and document recent accomplishments. This Fiscal Year 2017 edition of Our Changing Planet provides a summary of programmatic achievements, recent progress, future priorities, and budgetary information for USGCRP. It thereby meets the requirements set forth in the U.S. Global Change Research Act of 1990 (Section 102, P. L. 101–606) to provide an annual report on Federal global change research priorities and programs. It does not express any regulatory policies of the United States or any of its agencies, or make any findings that could serve as predicates for regulatory action.

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November 2016

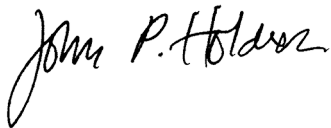
Members of the Congress:

On behalf of the National Science and Technology Council, I am pleased to transmit Our Changing Planet: The U.S. Global Change Research Program for Fiscal Year (FY) 2017. USGCRP coordinates and integrates scientific research across 13 Federal agencies whose missions include understanding changes in the global environment and their implications for society. In accordance with the Global Change Research Act (GCRA) of 1990, the enclosed report summarizes USGCRP's recent progress and achievements, future priorities, and associated budget information.

This latest edition of Our Changing Planet includes an overview of the USGCRP research enterprise and recent highlights that demonstrate how the Program is fulfilling its 2012–2021 Strategic Plan. The report also spotlights progress in interagency research priority areas that intersect with President Obama's Climate Action Plan, such as Arctic research and resilience, methane cycling in the context of the carbon cycle, and water-cycle extremes and their impacts. The highlights in this Our Changing Planet report represent the broad spectrum of USGCRP activities that extend from Earth system observations, modeling, and fundamental research through scientific assessment, decision support, education, and public engagement. This approach fully addresses the GCRA mandate to “understand, assess, predict, and respond to human-induced and natural processes of global change.”

Our Changing Planet FY 2017 summarizes USGCRP's significant advancements toward achieving its scientific goals, delivering on its Congressional mandate, and building a knowledge base that effectively informs human responses to global change. I appreciate the close cooperation of the participating agencies and look forward to working with members of the Congress to implement the continuation of this essential national program.

Sincerely,

A handwritten signature in black ink, reading "John P. Holdren". The signature is fluid and cursive, with the first name "John" being the most prominent part.

Dr. John P. Holdren
Director, Office of Science and Technology Policy
Assistant to the President for Science and Technology

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